Table C-16. Federal obligations for research, by agency and performer: fiscal year 1998 (revised)

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						Extramur	al		Γαί	ge 1 of 3
					United Sta	tes and terri	itories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	30,922,269	7,964,727	4,635,074	844,134	11,741,033	2,742,980	2,425,249	214,489	240,080	114,503
Departments:										
Department of Agriculture, total	1,333,905 4,018 689,730	897,124 3,714 649,727	10,858 0 0	0 0 0	408,122 274 34,704	0 0 0	12,206 0 2,438	0 0 0	1,827 30 9	3,768 0 2,852
Education, & Extension Service Economic Research Service	386,445 71,547	19,923 63,077	8,920 1,900	0 0	349,997 4,961	0 0	6,383 467	0 0	1,222 311	0 831
Food Safety Inspection Service	125 1,422 172,300	125 971 154,710	0 0 38	0 0 0	0 451 15,610	0 0 0	0 0 1,602	0 0 0	0 0 255	0 0 85
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	549 3,333 4,436	549 3,112 1,216	0 0 0	0 0 0	0 205 1,920	0 0 0	0 16 1,300	0 0 0	0 0 0	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	806,993 5,166 557 305,376 492,128	625,411 5,166 50 209,924 406,505	79,211 0 19 75,266 3,926	0 0 0 0	99,042 0 288 19,356 79,398	22 0 0 22 0	2,787 0 200 611 1,976	0 0 0 0	323 0 0 0 323	197 0 0 197 0
Information Administration	3,766	3,766	0	0	0	0	0	0	0	0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	3,969,891 736,879 817,841 822,158 1,593,013	1,407,916 394,410 454,988 323,021 235,497	1,371,604 236,047 224,863 231,196 679,498	12,053 275 274 2,258 9,246	964,689 85,722 108,916 225,873 544,178	84,369 521 655 8,319 74,874	86,489 14,467 20,562 22,169 29,291	17,464 2,715 3,793 1,968 8,988	0 0 0 0	25,307 2,722 3,790 7,354 11,441
Ballistic Missile Defense Org	126,801 856,268 1,094 8,016	24,783 68,221 1,094 7,171	83,050 434,870 0 0	100 5,121 0 0	7,081 261,874 0 0	9,536 43,494 0 0	541 28,332 0 0	7,818 0 845	0 0 0 0	1,710 6,538 0 0
Agency <sup>2</sup>	205,073	61,136	130,687	3,940	2,414	3,985	0	125	0	2,786
Special Operations Command	15,696 380,065	4,755 68,337	9,578 21,313	0 85	1,363 271,446	0 17,859	0 418	0 200	0 0	0 407
Department of Education	148,742	6,997	5,158	0	103,202	0	32,383	0	1,002	0
Department of Energy	3,787,511	183,005	202,914	669,206	563,536	1,934,102	65,786	164,943	2,955	1,064

Table C-16. Federal obligations for research, by agency and performer: fiscal year 1998 (revised)

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									Pa	ge 2 of 3
						Extramur	al			
					United Sta	tes and terri	tories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch Centers for Disease Control &	12,018,474 2,435 23,456 138,798	2,437,547 185 948 28,467	655,528 0 2,080 52,297	143,310 0 0 0	6,854,037 0 9,874 37,020	27,722 0 0 0	1,729,181 250 8,621 20,770	19,124 0 0 0	114,666 2,000 1,895 0	37,359 0 38 244
Prevention	343,559	239,825	33,336	0	61,368	0	3,260	0	5,770	0
Food & Drug Administration	142,937 51,236 12,925 11,289,180 13,948	118,796 353 2,960 2,041,475 4,538	4,089 38,190 0 524,275 1,261	0 0 0 143,310 0	14,155 5,329 7,529 6,715,863 2,899	0 0 0 27,722 0	5,492 6,006 2,436 1,680,106 2,240	0 0 0 19,124 0	70 1,089 0 100,832 3,010	335 269 0 36,473
Office of the Asst Secretary, Planning & Evaluation	13,948	4,538	1,261	0	2,899	0	2,240	0	3,010	0
Dept of Housing & Urban Development	9,211	6,263	913	0	478	0	1,557	0	0	0
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	502,852 6,626 437,198 29,286 29,742	436,263 5,557 407,461 6,614 16,631	11,136 0 1,930 7,505 1,701	0 0 0 0	46,365 656 20,997 13,578 11,134	0 0 0 0	731 173 0 282 276	0 0 0 0	7,292 240 6,810 242 0	1,065 0 0 1,065 0
Department of Justice, total  Bureau of Prisons  Office of Justice Programs	42,005 4,326 37,679	3,366 2,500 866	10,920 0 10,920	0 0 0	18,201 0 18,201	0 0 0	7,312 0 7,312	0 0 0	2,206 1,826 380	0 0 0
Department of Labor, total	22,079 12,400 2,197 4,592 95	10,689 8,400 47 1,697 30	4,108 0 0 2,895 0	0 0 0 0	6,208 4,000 2,100 0 65	0 0 0 0	1,074 0 50 0	0 0 0 0	0 0 0 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 2,740	55 460	0 1,213	0	0 43	0 0	0 1,024	0	0 0	0 0
Department of State <sup>3</sup>	852	324	513	0	0	15	0	0	0	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	401,046 5,110 151,550 169,605 21,191	104,542 3,285 31,506 30,417 9,360	164,759 1,325 107,989 33,975 9,945	4,147 500 2,228 1,419 0	25,801 0 3,666 11,633 350	3,427 0 0 3,370 0	10,125 0 0 7,339 1,404	6,231 0 6,161 0	81,452 0 0 81,452 0	562 0 0 0 132
Federal Transit Administration	7,400	400	0	0	6,000	0	1,000	0	0	0
Administration	41,621 4,569	26,637 2,937	10,199 1,326	0	4,048 104	0 57	307 75	0 70	0 0	430 0
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	52,553 2,676 47,942 684 776 475	38,746 2,676 35,053 684 50 283	13,807 0 12,889 0 726 192	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 0
Department of Veterans Affairs	269,066	269,066	0	0	0	0	0	0	0	0

### Table C-16. Federal obligations for research, by agency and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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										ge 3 01 3
						Extramu	al			
					United Sta	ites and terri	tories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	680 477,200 3,025 1,144 172,923	15 246,929 3,025 1,144 19,040	200 66,512 0 0 10,266	0 0 0 0	400 106,099 0 0 11,996	0 0 0 0	65 44,748 0 0 110,870	0 0 0 0	0 11,204 0 0	0 1,708 0 0 20,751
Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	172,923 455 4,413,651 120 2,289,337	19,040 455 1,104,392 120 16,954	10,266 0 1,918,670 0 101,421	0 0 1,354 0 0	11,996 0 647,500 0 1,874,860	0 0 543,740 0 139,079	110,870 0 174,016 0 144,022	0 0 4,794 0 211	0 0 7,747 0 3,596	20,751 0 11,438 0 9,194
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration Tennessee Valley Authority US Arms Control & Disarmament Agcy³ United States Information Agency US International Trade Commission	51,700 120,000 17,422 809 1,200 258 7,165	14,301 120,000 2,336 809 525 258 7,165	3,486 0 2,415 0 675	14,064 0 0 0 0 0	5,180 0 5,317 0 0	10,504 0 0 0 0	353 0 1,544 0 0	1,722 0 0 0 0 0	5,810 0 0 0 0	2,090 0 0 0 0 0

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

<sup>3</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-27. Federal obligations for basic research, by agency and performer: fiscal year 1998 (revised)

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						Extramu	ıral			<u>ge 1012</u>
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	15,613,012	2,917,780	1,119,681	326,405	7,952,176	1,642,306	1,397,565	121,849	84,876	50,374
Departments:										
Department of Agriculture, total	603,763 401,711	421,443 378,413	3,798 0	0	173,716 20,212	0 0	2,730 1,420	0	404 5	1,672 1,661
Education, & Extension Service Economic Research Service Food Safety Inspection Service	163,451 7,155 125	8,576 7,155 125	3,797 0 0	0 0 0	149,481 0 0	0 0 0	1,208 0 0	0 0 0	389 0 0	0 0 0
Foreign Agricultural Service Forest Service Nat'l Agricultural Statistics Svc	924 29,300 1,097	721 25,356 1,097	0 1 0	0 0 0	203 3,820 0	0 0 0	0 102 0	0 0 0	0 10 0	0 11 0
Department of Commerce, total	39,593 550 38,636 407	35,394 550 34,639 205	456 0 456 0	0 0 0 0	3,521 0 3,521 0	20 0 20 0	102 0 0 102	0 0 0 0	100 0 0 100	0 0 0 0
Department of Defense, total  Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	1,030,839 185,564 181,955 328,975 334,345	309,521 85,523 87,492 109,119 27,387	123,947 24,014 29,610 32,956 37,367	404 0 100 226 78	546,477 68,477 58,001 157,677 262,322	11,416 417 206 6,123 4,670	25,250 4,613 2,267 16,896 1,474	3,850 0 3,155 0 695	0 0 0 0	9,974 2,520 1,124 5,978 352
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	78,259 256,086	6,367 21,020	35,394 1,973	0 78	29,507 232,815	4,670 0	1,474 0	695 0	0 0	152 200
Department of Education	2,063	146	0	0	1,917	0	0	0	0	0
Department of Energy	2,028,805	46,895	48,315	231,118	449,065	1,100,508	44,076	104,964	2,800	1,064
Dept of Health & Human Svcs, total Health Resources & Services Admin National Institutes of Health	7,355,363 1,050 7,354,313	1,263,026 1,050 1,261,976	322,957 0 322,957	93,364 0 93,364	4,467,813 0 4,467,813	18,555 0 18,555	1,098,686 0 1,098,686	10,596 0 10,596	57,352 0 57,352	23,014 0 23,014
Department of the Interior, total	48,733 48,187 546	45,384 45,344 40	0 0 0	0 0 0	3,168 2,782 386	0 0 0	120 0 120	0 0 0	61 61 0	0 0 0
Department of Justice, total	16,000 16,000	250 250	3,545 3,545	0	8,825 8,825	0 0	3,200 3,200	0	180 180	0
Department of Labor, total	11,100 11,100	7,100 7,100	0 0	0	4,000 4,000	0 0	0	0 0	0 0	0 0
Department of Transportation, total Federal Highway Administration	34,971 34,971	8,458 8,458	3,871 3,871	627 627	3,743 3,743	3,370 3,370	971 971	0 0	13,931 13,931	0 0
Department of the Treasury, totalBureau of Engraving & Printing	34 34	34 34	0 0	0	0 0	0 0	0	0 0	0 0	0 0
Department of Veterans Affairs	120,015	120,015	0	0	0	0	0	0	0	0

### Table C-27. Federal obligations for basic research, by agency and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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								,	gc 2 01 2
					Extramu	ural			
				United St	ates and ter	ritories			
Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
1,815 2,023,793	218 218 506,613	0 0 559,885	0 0 0 892	18 18 495,494	0 0 369,358		0 0 0 2,239	1,961 0 0 4,547	299 218 218 4,939
2,118,677 120,000 48	16,140 120,000 48	41,265 0 0	0	1,775,848 0 0	139,079 0 0	133,411 0 0	200 0 0	3,540 0 0	9,194 0 0
	57,400 1,815 1,815 2,023,793 2,118,677 120,000	57,400 17,095 1,815 218 1,815 218 2,023,793 506,613 2,118,677 16,140 120,000 120,000	mural 1 Industrial firms  57,400 17,095 11,642  1,815 218 0 1,815 218 0 2,023,793 506,613 559,885 2,118,677 16,140 41,265  120,000 120,000 0	mural 1 Industrial firms FFRDCs admin by industrial firms  57,400 17,095 11,642 0  1,815 218 0 0  1,815 218 0 0  2,023,793 506,613 559,885 892 2,118,677 16,140 41,265 0  120,000 120,000 0 0	Total Intramural 1 Industrial firms FFRDCs admin by industrial firms Universities and colleges  57,400 17,095 11,642 0 18,571  1,815 218 0 0 0 18 1,815 218 0 0 18 2,023,793 506,613 559,885 892 495,494 2,118,677 16,140 41,265 0 1,775,848  120,000 120,000 0 0 0 0	Total Intramural 1 Industrial firms FFRDCs admin by industrial firms Universities and colleges FRDCs admin by industrial firms Colleges FRDCs admin by univs and colleges Colleges Industrial firms Coll	Mural   Industrial firms   FFRDCs admin by intrial dustrial firms   Universities admin by universand colleges   FFRDCs admin by institutions   FFRDCs admin by universand colleges   Other nonprofit universand colleges   FFRDCs admin by universal colleges   FFRDCS admin b	Total	Total   Intramural   Industrial firms   Industria

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

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Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1998 (revised)

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									. ";	ge 1 of 3
						Extramu	ıral			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	. 15,309,257	5,046,947	3,515,393	517,729	3,788,857	1,100,674	1,027,684	92,640	155,204	64,129
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Cooperative State Research,	. 4,018	475,681 3,714 271,314	7,060 0 0	0 0 0	234,406 274 14,492	0 0 0	9,476 0 1,018	0 0 0	1,423 30 4	2,096 0 1,191
Education, & Extension Service Economic Research Service		11,347 55,922	5,123 1,900	0 0	200,516 4,961	0	5,175 467	0 0	833 311	0 831
Foreign Agricultural Service Forest Service Grain Inspection Packers &		250 129,354	0 37	0 0	248 11,790	0 0	0 1,500	0 0	0 245	0 74
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	. 2,236	549 2,015 1,216	0 0 0	0 0 0	0 205 1,920	0 0 0	0 16 1,300	0 0 0	0 0 0	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	. 4,616 . 557 . 266,740	590,017 4,616 50 175,285 406,300	78,755 0 19 74,810 3,926	0 0 0 0	95,521 0 288 15,835 79,398	2 0 0 2 0	2,685 0 200 611 1,874	0 0 0 0	223 0 0 0 223	197 0 0 197 0
Information Administration	. 3,766	3,766	0	0	0	0	0	0	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	. 551,315 . 635,886 . 493,183	1,098,395 308,887 367,496 213,902 208,110	1,247,657 212,033 195,253 198,240 642,131	11,649 275 174 2,032 9,168	418,212 17,245 50,915 68,196 281,856	72,953 104 449 2,196 70,204	61,239 9,854 18,295 5,273 27,817	13,614 2,715 638 1,968 8,293	0 0 0 0	15,333 202 2,666 1,376 11,089
Ballistic Missile Defense Org	. 778,009 1,094	24,783 61,854 1,094 7,171	83,050 399,476 0 0	100 5,121 0 0	7,081 232,367 0 0	9,536 38,824 0 0	541 26,858 0 0	7,123 0 845	0 0 0 0	1,710 6,386 0 0
Agency <sup>2</sup>	. 205,073	61,136	130,687	3,940	2,414	3,985	0	125	0	2,786
Special Operations Command Washington Headquarters Svcs		4,755 47,317	9,578 19,340	0 7	1,363 38,631	0 17,859	0 418	0 200	0 0	0 207
Department of Education	146,679	6,851	5,158	0	101,285	0	32,383	0	1,002	0
Department of Energy	. 1,758,706	136,110	154,599	438,088	114,471	833,594	21,710	59,979	155	0

Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1998 (revised)

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Agency and subdivision										Pag	ge 2 of 3
Dept of Health & Human Svcs, total   4,663,111   1,174,521   332,571   49,946   2,366,224   9,167   630,495   632,000   0,20							Extramu	ıral			
Dept of Health & Human Sucs, total   4,683,111   1,74,521   332,571   49,946   2,386,224   9,167   630,495   8,529   7,314   14,345   34,000   1,000   1,000   3,000						United St	ates and ter	ritories			
Administration on Aging	Agency and subdivision	Total		trial	admin by in- dustrial	sities and	admin by univs and	nonprofit insti-	admin by non- profit insti-	and local	Foreign
Prevention	Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch	2,435 23,456	185 948	0 2,080	0	0 9,874	0	250 8,621	0	2,000 1,895	0 38
Health Care Financing Admin		343,559	239,825	33,336	0	61,368	0	3,260	0	5,770	0
Planning & Urban Development   13,948   4,538   1,261   0   2,899   0   2,240   0   3,010   0	Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total	51,236 11,875 3,934,867	353 1,910 779,499	38,190 0 201,318	0 0 49,946	5,329 7,529 2,248,050	0 0 9,167	6,006 2,436 581,420	0 0 8,528	1,089 0 43,480	269 0 13,459
Department of the Interior, total		13,948	4,538	1,261	0	2,899	0	2,240	0	3,010	0
Bureau of Reclamation	Dept of Housing & Urban Development	9,211	6,263	913	0	478	0	1,557	0	0	0
Bureau of Prisons	Bureau of Reclamation	6,626 389,011 29,286	5,557 362,117 6,614	0 1,930 7,505	0 0 0	656 18,215 13,578	0 0 0	173 0 282	0 0 0	240 6,749 242	0 0 1,065
Bureau of Labor Statistics	Bureau of Prisons	4,326	2,500	0	0	0	0	, O	0	1,826	0
Pension & Welfare Benefits Admin         2,740         460         1,213         0         43         0         1,024         0         0         0           Department of State3         852         324         513         0         0         15         0         6,368         0         67,521         0         0         0         1,404         0         0	Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin	1,300 2,197 4,592	1,300 47 1,697	0	0 0 0	2,100 0	0 0 0	0 50 0	0 0 0	0 0 0	0 0 0
Department of Transportation, total   366,075   96,084   160,888   3,520   22,058   57   9,154   6,231   67,521   562   562   562   563	Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin										
Coast Guard         5,110         3,285         1,325         500         0 <td>Department of State<sup>3</sup></td> <td>852</td> <td>324</td> <td>513</td> <td>0</td> <td>0</td> <td>15</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Department of State <sup>3</sup>	852	324	513	0	0	15	0	0	0	0
National Highway Traffic Safety       41,621       26,637       10,199       0       4,048       0       307       0       0       430         Research & Special Programs Admin       4,569       2,937       1,326       0       104       57       75       70       0       0         Department of the Treasury, total       52,519       38,712       13,807       0	Coast Guard Federal Aviation Administration Federal Highway Administration	5,110 151,550 134,634	3,285 31,506 21,959	1,325 107,989 30,104	500 2,228 792	0 3,666 7,890	0 0 0	0 0 6,368	0 6,161 0	0 0 67,521	0 0 0
Administration         41,621         26,637         10,199         0         4,048         0         307         0         0         430           Research & Special Programs Admin         4,569         2,937         1,326         0         104         57         75         70         0         0           Department of the Treasury, total         52,519         38,712         13,807         0	Federal Transit Administration	7,400	400	0	0	6,000	0	1,000	0	0	0
Bureau of Engraving & Printing       2,642       2,642       0	Administration										
Department of Veterans Affairs	Bureau of Engraving & Printing	2,642 47,942 684 776	2,642 35,053 684 50	0 12,889 0 726	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
	Department of Veterans Affairs	149,051	149,051	0	0	0	0	0	0	0	0

### Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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									. "	90000
						Extramo	ural			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	680 419,800 3,025 1,144 171,108	15 229,834 3,025 1,144 18,822	200 54,870 0 0 10,266	0 0 0 0	400 87,528 0 0 11,978	0 0 0 0	65 36,916 0 0 109,509	0 0 0	9,243 0 0	1,409 0 0
Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	171,108 455 2,389,858 120 170,660	18,822 455 597,779 120 814	10,266 0 1,358,785 0 60,156	0 0 462 0 0	11,978 0 152,006 0 99,012	0 0 174,382 0 0	109,509 0 94,190 0 10,611	2,555 0	0 0 3,200 0 56	
Nuclear Regulatory Commission Social Security Administration Tennessee Valley Authority US Arms Control & Disarmament Agcy <sup>3</sup> United States Information Agency US International Trade Commission	51,700 17,422 761 1,200 258 7,165	14,301 2,336 761 525 258 7,165	3,486 2,415 0 675 0	14,064 0 0 0 0 0	5,180 5,317 0 0 0	10,504 0 0 0 0 0	353 1,544 0 0 0 0	0 0 0 0	5,810 0 0 0 0	

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency

<sup>&</sup>lt;sup>3</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-49. Federal obligations for development, by agency and performer: fiscal year 1998 (revised)

		[Doll	lars in thou	ısands]					Pag	ge 1 of 3
						Extramura	al			
					United State	es and territ	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	40,981,024	9,149,264	27,204,645	344,716	1,624,829	1,147,175	729,882	388,498	207,386	184,629
Departments:										
Department of Agriculture, total Agricultural Marketing Service	703 68,215 20,462	99,318 703 64,259 16,595 65	0 0 0 0	0 0 0 0	7,257 0 3,432 3,825 0	0 0 0 0	283 0 241 42 0	0 0 0 0	1 0 1 0 0	282 0 282 0 0
Forest Service		15,500 2,196	0	0	0	0	0	0	0	0
Department of Commerce, total	3,396 88,991	48,428 3,396 16,090 25,671	72,722 0 72,722 0	0 0 0	7,616 0 174 1,720	5 0 5 0	9,473 0 0 0	0 0 0 0	3,341 0 0 25	0 0 0 0
National Telecommunications & Information Administration	21,782	3,271	0	0	5,722	0	9,473	0	3,316	0
Department of Defense, total	13,102,171 4,219,894	6,870,947 1,135,442 1,409,401 2,577,265 1,517,401	22,969,765 11,564,064 2,661,880 4,431,813 4,291,527	72,968 18,225 2,462 4,540 47,741	457,501 31,008 59,033 175,504 191,956	262,837 103,983 29,444 34,383 95,027	139,297 522 21,265 29,136 88,374	21,959 59,959		142,106 2,606 14,375 21,517 103,608
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency  Defense Threat Reduction		583,631 226,581 16,026 29,503	2,453,536 750,014 32,763 32,771	23,546 4,868 506 0	64,724 88,852 0 4,138	48,777 25,164 312 100	100 34,042 0 47,320	22,572 16,428 4,937 290	0 0 0 0	97,767 892 0 0
Agency <sup>2</sup>	70,704	9,803	53,242	192	4,849	1,376	0	702	0	540
Joint Staff Special Operations Command Washington Headquarters Svcs Operational Test & Evaluation,	126,996	53,945 38,480 559,432	0 86,973 882,228	0 1,543 17,086	0 0 29,393	0 0 19,298	0 0 6,912	0 0 7,200	0 0 3	0 0 4,409
Director	30,339	7,281	8,253	0	0	0	0	14,805	0	0
Secretary of Defense	242,045	224,157	12,228	0	0	0	0	5,660	0	0
Department of Defense, total advanced technology (at)	1,431,316 698,249 515,810	1,478,698 524,758 249,498 126,014 578,428	3,278,241 760,083 383,654 292,509 1,841,995	21,983 5,697 503 0 15,783	276,993 29,672 35,973 60,302 151,046	152,175 80,854 3,968 7,686 59,667	131,311 0 17,336 27,620 86,355	64,955 17,652 1,095 1,636 44,572	12,600 12,600 0 0	107,625 0 6,222 43 101,360
Ballistic Missile Defense Organization (at) Defense Advanced Research		133,941	703,779	588	25,705	14,504	50	21,816	0	95,669
Projects Agency (at) Defense Logistics Agency (at) Defense Threat Reduction	105,704		699,721 26,739	4,868 0	88,852 4,138	25,164 0	34,042 47,320	16,428 210	0	892 0
Agency (at) <sup>2</sup> Joint Staff (at)		9,803 53,945	53,242 0	192 0	4,849 0	1,376 0	0	702 0	0	540 0
Special Operations Command (at) Washington Headquarters Services (at)		15,997 145,701	36,151 322,363	648 9,487	0 27,502	0 18,623	0 4,943	0 5,416	0	0 4,259
Services (at)	550,294	173,701	322,303	∌, <del>4</del> 07	21,502	10,023	7,343	3,410		7,239

Table C-49. Federal obligations for development, by agency and performer: fiscal year 1998 (revised)

		[Doll	lars in thou	ısands]					Pag	ge 2 of 3
						Extramura	ıl			
					United State	es and territo	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Department of Defense, total major systems (ms)	25,791,751 11,670,855 3,521,645 6,818,307 3,508,560	5,392,249 610,684 1,159,903 2,451,251 938,973	19,691,524 10,803,981 2,278,226 4,139,304 2,449,532	50,985 12,528 1,959 4,540 31,958	180,508 1,336 23,060 115,202 40,910	110,662 23,129 25,476 26,697 35,360	7,986 522 3,929 1,516 2,019	225,508 118,299 20,864 58,323 7,557	97,848 97,770 75 0 3	34,481 2,606 8,153 21,474 2,248
Ballistic Missile Defense Organization (ms) Defense Advanced Research	2,298,601	449,690	1,749,757	22,958	39,019	34,273	50	756	0	2,098
Projects Agency (ms) Defense Information Systems	85,130	34,837	50,293	0	0	0	0	0	0	0
Agency (ms) Defense Logistics Agency (ms) Special Operations Command (ms)	54,544 8,418 74,200	16,026 2,206 22,483	32,763 6,032 50,822	506 0 895	0 0 0	312 100 0	0 0 0	4,937 80 0	0 0 0	0 0 0
Washington Headquarters Services (ms) Operational Test & Evaluation,	987,667	413,731	559,865	7,599	1,891	675	1,969	1,784	3	150
Director (ms) Test & Evaluation, Deputy Under	30,339	7,281	8,253	0	0	0	0	14,805	0	0
Secretary of Defense (ms)	242,045	224,157	12,228	0	00.440	0	0 004	5,660	0	0
Department of Education  Department of Energy	55,713 2,086,293	2,554 280,215	10,138	0 249,019	22,110 59,660	0 302,070	20,661 14,515	95,528	250 419	946
Dept of Health & Human Svcs, total Administration on Aging Agcy for HIth Care Policy & Rsch National Institutes of Health Office of the Secretary, total	1,685,758 7,991 7,700 1,591,023 3,054	371,845 341 7,700 363,526 277	102,465 228 0 102,237	19,913 0 0 19,913 0	874,728 850 0 849,063 2,777	2,460 0 0		1,387 0 0 1,387	32,864 1,946 0 10,402	4,208 0 0 4,208 0
Office of Public Hlth & Science Substance Abuse & Mental Health	3,054	277	0	0	2,777	0	0	0	0	0
Services Administration <sup>3</sup>	75,990	1	0	0	22,038	0	33,435	0	20,516	0
Dept of Housing & Urban Development	18,796	10,697	5,594	0	180	0	2,325	0	0	0
Department of the Interior, total	29,117 2,209 26,908	24,569 1,000 23,569	2,895 0 2,895	0 0 0	1,609 1,209 400	0 0 0	0 0 0	0 0 0	44 0 44	0 0 0
Department of Justice, total Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	58,573 3,784 35,812 18,977	36,313 500 35,812 1	1,479 0 0 1,479	0 0 0 0	1,733 0 0 1,733	0 0 0	3,949 0 0 3,949	0 0 0 0	15,099 3,284 0 11,815	0 0 0 0
Department of Labor, total  Employment & Training Admin  Office of the Secretary  Pension Benefit Guaranty Corp	5,682 5,025 105 552	334 108 30 196	356 0 0 356	0 0 0	75 0 75 0	0 0 0 0	4,917 4,917 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	165,071 15,329 76,431 57,664 312	86,251 9,504 61,130 9,148 156	26,334 5,825 9,617 9,994 156	190 0 0 190 0	12,078 0 5,684 2,497 0	0 0 0 0	5,194 0 0 1,785 0	0 0 0 0	35,024 0 0 34,050 0	0 0 0 0
Federal Transit Administration Office of the Secretary	10,183 3,433 1,719	1,903 3,433 977	0 0 742	0 0 0	3,897 0 0	0 0 0	3,409 0 0	0 0 0	974 0 0	0 0 0

### Table C-49. Federal obligations for development, by agency and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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						Extramura	al			
					United State	es and territ	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service United States Customs Service United States Mint	12,515 123 4,086 8,250 56	4,807 123 1,849 2,834 1	7,708 0 2,237 5,416 55	0 0 0 0	00000	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Department of Veterans Affairs Other agencies:	8,028	8,028	0	0	0	0	0	0	0	0
Environmental Protection Agency Internat'l Development Cooperation Agency, total Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin Tennessee Valley Authority	94,000 39,109 39,109 1,087 5,154,378 1,846	8,059 3,520 3,520 425 1,291,108 1,846	24,823 391 391 637 2,895,417	0 0 0 0 2,626	39,598 1,564 1,564 25 139,095	0 0 0 0 579,803	16,701 33,243 33,243 0 203,436	0	4,181 0 0 0 5,715	638 391 391 0 36,058

- Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** FFRDCs = Federally funded research and development centers

# Table C-83. Federal obligations for research and development for selected agencies, by State and performer: fiscal year 1998 (revised)

## [Dollars in thousands]

Page 1 of 2

									Page 1 of 2
						Extramural			
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Total	70,512,996	16,544,621	31,764,775	1,174,386	13,189,193	3,879,236	2,934,878	602,808	423,099
California	12,215,846 7,964,210 5,562,227 4,667,864 4,110,756	1,595,270 4,766,005 698,173 1,480,464 596,978	5,937,882 2,054,921 4,388,253 2,694,070 2,741,834	13,220 163,223 0 879 0	1,886,772 798,113 344,724 244,283 691,377	2,017,569 0 0 61,895 0	519,452 178,769 125,380 43,793 69,230	120,883 0 0 135,732 1,496	124,798 3,179 5,697 6,748 9,841
Georgia	3,442,612 3,112,271 2,752,371 2,551,833 2,229,086	235,596 301,193 749,648 191,988 1,717,704	2,920,561 991,701 1,683,990 709,033 202,014	0 0 0 0 350	270,814 823,426 299,747 1,121,737 151,507	0 221,292 0 213,181 2,036	10,287 706,800 10,708 221,286 150,383	0 63,007 0 0 2,119	5,354 4,852 8,278 94,608 2,973
Alabama New Mexico Pennsylvania New Jersey Colorado	2,012,829 1,891,565 1,886,258 1,459,570 1,334,209	752,619 395,908 132,927 392,554 202,224	878,065 170,514 702,304 784,488 604,876	0 614,018 219 0 0	225,263 85,267 853,437 218,031 278,740	130,201 608,320 16,884 37,387 65,204	24,312 15,147 173,970 17,106 54,822	0 0 0 6,082 123,027	2,369 2,391 6,517 3,922 5,316
Washington	1,244,174 1,127,553 985,734 930,735 924,652	183,685 71,946 138,493 48,544 235,873	427,331 82,221 636,632 560,924 121,168	0 0 0 0	355,630 504,232 159,883 294,459 499,001	0 398,996 36,485 0 0	121,688 61,529 7,777 22,202 63,610	149,770 0 0 0 0	6,070 8,629 6,464 4,606 5,000
Minnesota Michigan Connecticut Tennessee Utah	807,083 748,443 692,341 621,155 392,807	38,437 111,457 18,257 37,925 135,365	472,522 160,127 379,213 54,239 111,547	0 0 0 307,181 0	196,262 450,082 265,433 181,024 142,514	0 0 0 10,256 0	93,791 17,989 23,557 27,685 1,296	0 0 0 0	6,071 8,788 5,881 2,845 2,085
Rhode Island Indiana Wisconsin Oregon Nevada	385,411 377,735 332,203 314,710 290,853	222,106 38,023 38,021 87,846 48,514	78,082 142,363 16,017 24,915 211,316	0 0 0 0	60,182 189,882 265,640 171,995 25,268	0 200 0 0	22,978 3,318 8,233 20,849 4,107	0 0 0 0	2,063 3,949 4,292 9,105 1,648
Mississippi  New Hampshire  West Virginia  lowa  Louisiana	280,366 269,132 242,844 236,084 223,555	132,896 33,959 96,682 32,701 84,315	70,301 163,677 84,815 24,757 20,104	0 0 0 0	67,535 69,064 26,830 150,856 111,713	0 0 30,448 20,824 0	7,886 1,669 868 4,093 4,117	0 0 0 0	1,748 763 3,201 2,853 3,306
Idaho Kentucky South Carolina Oklahoma Hawaii	213,625 188,955 186,221 175,497 160,826	25,042 6,591 44,872 51,038 54,776	108,599 99,613 22,122 54,017 30,246	57,105 0 18,191 0 0	20,652 73,577 92,443 60,570 52,256	0 0 0 0	1,337 1,708 2,583 7,988 21,777	0 0 692 0 0	890 7,466 5,318 1,884 1,771
Kansas Alaska Maine Arkansas Nebraska	128,697 106,939 103,901 97,026 84,982	24,757 44,010 10,953 45,895 28,873	19,642 17,637 44,317 2,199 2,104	0 0 0 0	78,444 29,598 15,190 44,974 46,328	0 0 0 0	1,210 3,707 31,050 2,488 6,572	0 0 0 0	4,644 11,987 2,391 1,470 1,105
Montana Vermont North Dakota South Dakota Delaware	80,670 57,596 52,088 46,003 45,214	33,101 4,171 27,360 27,501 3,722	9,897 12,827 376 6,083 7,877	0 0 0 0	32,949 37,865 21,036 9,429 29,971	0 0 0 0	3,149 1,483 1,145 2,125 3,042	0 0 0 0	1,574 1,250 2,171 865 602

## Table C-83. Federal obligations for research and development for selected agencies, by State and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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									- 3 -
						Extramural			
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	33,549 111,908 61,938 49,970 18,222	11,991 40,238 7,476 32,762 15,434	1,108 16,847 51 16,796 2,487	0 0 0 0	16,758 46,129 45,718 411 301	0 8,058 8,058 0 0		0 0 0 0	865 636 635 1 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY: FFRDCs = Federally funded research and development centers

Table C-83a. Percentage distribution of Federal obligations for research and development to each performer for selected agencies, by State: fiscal year 1998 (revised)

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						Extramural			Page 1 01 2
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
California	17.3 11.3 7.9 6.6 5.8	9.6 28.8 4.2 8.9 3.6	18.7 6.5 13.8 8.5 8.6	1.1 13.9 .0 .1	14.3 6.1 2.6 1.9 5.2	52.0 .0 .0 1.6 .0	17.7 6.1 4.3 1.5 2.4	20.1 .0 .0 22.5 .2	29.5 .8 1.3 1.6 2.3
Georgia Massachusetts Florida New York District of Columbia	4.9 4.4 3.9 3.6 3.2	1.4 1.8 4.5 1.2 10.4	9.2 3.1 5.3 2.2 .6	.0 .0 .0 .0	2.1 6.2 2.3 8.5 1.1	.0 5.7 .0 5.5 .1	.4 24.1 .4 7.5 5.1	.0 10.5 .0 .0	1.3 1.1 2.0 22.4 .7
Alabama New Mexico Pennsylvania New Jersey Colorado	2.9 2.7 2.7 2.1 1.9	4.5 2.4 .8 2.4 1.2	2.8 .5 2.2 2.5 1.9	.0 52.3 * .0	1.7 .6 6.5 1.7 2.1	3.4 15.7 .4 1.0 1.7	.8 .5 5.9 .6 1.9	.0 .0 .0 1.0 20.4	.6 .6 1.5 .9 1.3
Washington	1.8 1.6 1.4 1.3 1.3	1.1 .4 .8 .3 1.4	1.3 .3 2.0 1.8 .4	.0 .0 .0 .0	2.7 3.8 1.2 2.2 3.8	.0 10.3 .9 .0	4.1 2.1 .3 .8 2.2	24.8 .0 .0 .0	1.4 2.0 1.5 1.1 1.2
Minnesota	1.1 1.1 1.0 .9 .6	.2 .7 .1 .2 .8	1.5 .5 1.2 .2 .4	.0 .0 .0 26.2 .0	1.5 3.4 2.0 1.4 1.1	.0 .0 .0 .3	3.2 .6 .8 .9	.0 .0 .0 .0	1.4 2.1 1.4 .7 .5
Rhode Island Indiana Wisconsin Oregon Nevada	.5 .5 .5 .4 .4	1.3 .2 .2 .5 .3	.2 .4 .1 .1	.0 .0 .0 .0	.5 1.4 2.0 1.3 .2	.0 * .0 .0	.8 .1 .3 .7	.0 .0 .0 .0	.5 .9 1.0 2.2 .4
Mississippi New Hampshire West Virginia Iowa Louisiana	.4 .4 .3 .3	.8 .2 .6 .2 .5	.2 .5 .3 .1	.0 .0 .0 .0	.5 .5 .2 1.1 .8	.0 .0 .8 .5	.3 .1 * .1	.0 .0 .0 .0	.4 .2 .8 .7
ldaho Kentucky South Carolina Oklahoma Hawaii	.3 .3 .2 .2	.2 * .3 .3	.3 .1 .2 .1	4.9 .0 1.5 .0	.2 .6 .7 .5	.0 .0 .0 .0	.1 .1 .3 .7	.0 .0 .1 .0	.2 1.8 1.3 .4 .4
Kansas Alaska Maine Arkansas Nebraska	.2 .2 .1 .1	.1 .3 .1 .3 .2	.1 .1 .1 *	.0 .0 .0 .0	.6 .2 .1 .3	.0 .0 .0 .0	.1 1.1 .1 .2	.0 .0 .0 .0	1.1 2.8 .6 .3
Montana Vermont North Dakota South Dakota Delaware	.1 .1 .1 .1	.2 * .2 .2 *	* * *	.0 .0 .0 .0	.2 .3 .2 .1 .2	.0 .0 .0 .0	.1 .1 .1 .1	.0 .0 .0 .0	.4 .3 .5 .2

Table C-83a. Percentage distribution of Federal obligations for research and development to each performer for selected agencies, by State: fiscal year 1998 (revised)

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						Extramural			
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	* 0.2 .1 .1	0.1 .2 * .2 .1	0.1 * .1	.0 .0 .0 .0	0.1 .3 .3 *	.0 0.2 .2 .0	0.1 .0 .0 .0	.0 .0 .0 .0	0.2 .2 .2 .*

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY:

 $^\star$  = Amount less than .05 percent FFRDCs = Federally funded research and development centers

Table C-83b. Percentage distribution of Federal obligations for research and development to each State for selected agencies, by performer: fiscal year 1998 (revised)

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						Extramural			1 age 1 01 2
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Total	100.0	23.5	45.0	1.7	18.7	5.5	4.2	0.9	0.6
California	100.0 100.0 100.0 100.0 100.0	13.1 59.8 12.6 31.7 14.5	48.6 25.8 78.9 57.7 66.7	.1 2.0 .0 .*	15.4 10.0 6.2 5.2 16.8	16.5 .0 .0 1.3 .0	4.3 2.2 2.3 .9 1.7	1.0 .0 .0 2.9 *	1.0 * .1 .1 .2
Georgia	100.0 100.0 100.0 100.0 100.0	6.8 9.7 27.2 7.5 77.1	84.8 31.9 61.2 27.8 9.1	.0 .0 .0 .0	7.9 26.5 10.9 44.0 6.8	.0 7.1 .0 8.4 .1	.3 22.7 .4 8.7 6.7	.0 2.0 .0 .0	.2 .2 .3 3.7 .1
Alabama New Mexico Pennsylvania New Jersey Colorado	100.0 100.0 100.0 100.0 100.0	37.4 20.9 7.0 26.9 15.2	43.6 9.0 37.2 53.7 45.3	.0 32.5 * .0 .0	11.2 4.5 45.2 14.9 20.9	6.5 32.2 .9 2.6 4.9	1.2 .8 9.2 1.2 4.1	.0 .0 .0 .4 9.2	.1 .1 .3 .3
Washington	100.0 100.0 100.0 100.0 100.0	14.8 6.4 14.0 5.2 25.5	34.3 7.3 64.6 60.3 13.1	.0 .0 .0 .0	28.6 44.7 16.2 31.6 54.0	.0 35.4 3.7 .0	9.8 5.5 .8 2.4 6.9	12.0 .0 .0 .0	.5 .8 .7 .5
Minnesota Michigan Connecticut Tennessee Utah	100.0 100.0 100.0 100.0 100.0	4.8 14.9 2.6 6.1 34.5	58.5 21.4 54.8 8.7 28.4	.0 .0 .0 49.5 .0	24.3 60.1 38.3 29.1 36.3	.0 .0 .0 1.7 .0	11.6 2.4 3.4 4.5 .3	.0 .0 .0 .0	.8 1.2 .8 .5
Rhode Island Indiana Wisconsin Oregon Nevada	100.0 100.0 100.0 100.0 100.0	57.6 10.1 11.4 27.9 16.7	20.3 37.7 4.8 7.9 72.7	.0 .0 .0 .0	15.6 50.3 80.0 54.7 8.7	.0 .1 .0 .0	6.0 .9 2.5 6.6 1.4	.0 .0 .0 .0	.5 1.0 1.3 2.9 .6
Mississippi New Hampshire West Virginia lowa Louisiana	100.0 100.0 100.0 100.0 100.0	47.4 12.6 39.8 13.9 37.7	25.1 60.8 34.9 10.5 9.0	.0 .0 .0 .0	24.1 25.7 11.0 63.9 50.0	.0 .0 12.5 8.8 .0	2.8 .6 .4 1.7 1.8	.0 .0 .0 .0	.6 .3 1.3 1.2 1.5
Idaho	100.0 100.0 100.0 100.0 100.0	11.7 3.5 24.1 29.1 34.1	50.8 52.7 11.9 30.8 18.8	26.7 .0 9.8 .0	9.7 38.9 49.6 34.5 32.5	.0 .0 .0 .0	.6 .9 1.4 4.6 13.5	.0 .0 .4 .0	.4 4.0 2.9 1.1 1.1
Kansas	100.0 100.0 100.0 100.0 100.0	19.2 41.2 10.5 47.3 34.0	15.3 16.5 42.7 2.3 2.5	.0 .0 .0 .0	61.0 27.7 14.6 46.4 54.5	.0 .0 .0 .0	.9 3.5 29.9 2.6 7.7	.0 .0 .0 .0	3.6 11.2 2.3 1.5 1.3
Montana Vermont North Dakota South Dakota Delaware	100.0 100.0 100.0 100.0 100.0	41.0 7.2 52.5 59.8 8.2	12.3 22.3 .7 13.2 17.4	.0 .0 .0 .0	40.8 65.7 40.4 20.5 66.3	.0 .0 .0 .0	3.9 2.6 2.2 4.6 6.7	.0 .0 .0 .0	2.0 2.2 4.2 1.9 1.3

## Table C-83b. Percentage distribution of Federal obligations for research and development to each State for selected agencies, by performer: fiscal year 1998 (revised)

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						Extramural			
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	100.0 100.0 100.0 100.0 100.0	36.0 12.1	3.3 15.1 .1 33.6 13.6	.0 .0 .0 .0	41.2 73.8 .8	.0 7.2 13.0 .0	8.4 .0 .0 .0	.0 .0 .0 .0	2.6 .6 1.0 *

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY:

 $^\star$  = Amount less than .05 percent FFRDCs = Federally funded research and development centers

## [Dollars in thousands]

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					E	ktramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Alabama, total	2,012,829	752,619	878,065	0	225,263	130,201	24,312	0	2,369
Department of Agriculture	14,781 610 82,355	4,961 5 33,791	0 213 32,494	0 0 0	9,795 392 14,354	0 0 0	0 0 1,716	0 0 0	25 0 0
development <sup>3</sup> Department of Energy	1,075,142 152,195	400,252 49	672,003 16,198	0 0	2,427 4,410	0 130,201	460 1,337	0 0	C
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	164,201 4,662 3,465 4,531 498,536 12,351	404 4,304 159 0 308,694	2,861 35 355 230 153,176 500	0 0 0 0 0	147,132 255 759 960 33,697 11,082	0 0 0 0 0	13,784 0 0 3,341 2,905 769	0 0 0 0 0	20 68 2,192 0 64
Alaska, total	106,939	44,010	17,637	0	29,598	0	3,707	0	11,987
Department of Agriculture	7,574 24,261 932	5,159 19,743 632	0 0 187	0 0 0	2,415 4,472 113	0 0 0	0 0 0	0 0 0	0 46 0
development <sup>3</sup> Department of Energy	26,330 50	1,096 0	14,570 0	0 0	664 50	0	0	0 0	10,000 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	2,109 22,129 1,296 290 12,250 9,718	285 16,756 0 0 339 0	119 2,230 0 70 85 376	0 0 0 0 0	1,424 2,748 0 220 9,326 8,166	0 0 0 0 0	0 31 0 2,500 1,176	0 0 0 0 0	281 364 1,296 0 0
Arizona, total	985,734	138,493	636,632	0	159,883	36,485	7,777	0	6,464
Department of Agriculture  Department of Commerce  Department of Defense, research 2  Department of Defense, total	21,817 2,059 45,374	15,904 114 9,278	0 901 19,939	0 0 0	5,872 1,044 16,148	0 0 0	41 0 9	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	681,123 4,017	92,575 0	580,800 0	0 0	5,148 4,017	0	0	0	2,600 0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	84,299 11,984 1,753 2,512 56,587 74,209	4,830 10,780 0 0 5,012	3,533 47 25 212 29,150 2,025	0 0 0 0 0	67,961 1,015 25 2,300 20,867 35,486	0 0 0 0 0 36,485	6,149 7 0 0 1,358 213	0 0 0 0 0	1,826 135 1,703 0 200
Arkansas, total	97,026	45,895	2,199	0	44,974	0	2,488	0	1,470
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total  development <sup>3</sup>	26,191 388 3,953 4,467	13,730 58 0 3,857	9 0 196 550	0 0 0	12,452 0 3,757	0 0 0	0 330 0	0 0 0	0 0 0
Department of Energy	50	0,857	0	0	50	0	0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	49,208 4,443 1,405 381 1,881 4,659	23,983 4,267 0 0 0	679 4 0 0 685 76	0 0 0 0 0	22,363 132 0 381 1,196 4,583	0 0 0 0 0	2,158 0 0 0 0 0	0 0 0 0 0	25 40 1,405 0 0

## [Dollars in thousands]

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					F	xtramural		Pag	je 2 of 14
					L	Allalliulai			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
California, total	12,215,846	1,595,270	5,937,882	13,220	1,886,772	2,017,569	519,452	120,883	124,798
Department of Agriculture	80,711 656,996	57,938 18,401 115,869	53,469 301,420	0 0 0	20,113 7,610 186,720	0 0 27,319	461 534 19,826	0 0 5,842	0 697 0
development <sup>3</sup> Department of Energy		1,052,471 7,432	4,443,438 73,968	1,674 11,546	33,458 109,613	42,485 805,229	11,318 14,231	97,297 0	97,433 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,529,761 36,965 23,566 31,969 2,628,415 347,358	5,225 25,964 951 0 310,808 211	121,515 1,047 5,743 1,086 924,573 11,623	0 0 0 0 0	1,009,445 9,455 4,676 23,237 168,470 313,975	22,030 0 0 0 1,120,293 213	355,107 22 1,461 821 94,448 21,223	14,689 0 0 0 2,942 113	1,750 477 10,735 6,825 6,881
Colorado, total	1,334,209	202,224	604,876	0	278,740	65,204	54,822	123,027	5,316
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	26,699 86,190 58,227	20,378 76,599 4,930	0 1,917 36,660	0 0 0	6,143 7,674 14,295	0 0 16	178 0 2,296	0 0 30	0 0 0
development <sup>3</sup> Department of Energy		46,242 2,910	449,151 1,500	0	2,178 8,618	1,875 0	1,737 2,621	0 122,997	0 40
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	187,331 45,101 11,836 10,201 156,560 112,195	745 41,871 3 0 8,130 416	7,545 42 10,394 70 93,036 4,561	0 0 0 0 0	140,823 2,648 101 4,126 49,087 43,047	0 0 0 381 62,932	35,005 188 0 6,005 5,757 1,035	0 0 0 0 0	3,213 352 1,338 0 169 204
Connecticut, total	692,341	18,257	379,213	0	265,433	0	23,557	0	5,881
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	6,151 5,728 39,490	2,591 235 1,711	0 3,145 27,108	0 0 0	2,679 2,348 8,400	0 0 0	0 0 2,271	0 0 0	881 0 0
development <sup>3</sup> Department of Energy	244,089 54,480	3,400 0	232,876 44,129	0	290 10,351	0 0	7,523 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	236,460 1,467 14,327 891 63,436 25,822	24 1,296 9,000 0 0	6,995 55 3,704 210 58,961 2,030	0 0 0 0 0	215,093 116 0 245 2,441 23,470	0 0 0 0 0	11,407 0 0 0 2,034 322	0 0 0 0 0	2,941 0 1,623 436 0
Delaware, total	45,214	3,722	7,877	0	29,971	0	3,042	0	602
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup> Department of Energy	3,715 1,818 9,670 2,065 1,504	1,366 634 628 386 0	0 214 3,414 1,601 181	0 0 0	2,349 970 5,540 78	0 0 0 0	0 0 88 0 60	0 0 0	0 0 0
Department of Energy  Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	7,577 828 922 1,554	5 703 0 0	841 0 400 0 839 387	0 0 0 0 0 0 0	1,263 6,148 95 0 1,554 2,125 9,849	0 0 0 0 0	533 0 0 0 1,072 1,289	0 0 0 0 0	50 30 522 0 0

## [Dollars in thousands]

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								Pag	e 3 of 14
					E	ktramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
District of Columbia, total	2,229,086	1,717,704	202,014	350	151,507	2,036	150,383	2,119	2,973
Department of Agriculture	168,355 16,087 243,464	157,585 14,066 208,289	9,278 522 16,683	0 0 0	758 796 14,798	0 0 0	589 703 3,694	0 0 0	145 (
development <sup>3</sup>	850,701 282,183	685,541 268,485	117,253 2,422	350 0	42,222 1,750	2,036 0	1,250 9,526	2,049 0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	179,298 2,351 145,327 70,834 196,235 74,251	54,131 2,030 101,069 51,000 169,136 6,372	17,076 134 31,529 2,082 3,749 1,286	0 0 0 0	71,810 32 4,179 590 7,177 7,395	0 0 0 0 0	36,081 155 8,057 14,987 16,143 59,198	0 0 70 0 0	200 423 2,175 30
Florida, total	2,752,371	749,648	1,683,990	0	299,747	0	10,708	0	8,278
Department of Agriculture	35,715 46,249 137,227	23,313 35,271 65,939	153 1,924 37,831	0 0 0	12,219 8,629 32,940	0 0 0	0 349 517	0 0 0	30 76 0
development <sup>3</sup> Department of Energy	1,834,182 57,739	380,814 0	1,451,687 45,336	0 0	1,498 12,403	0 0	10 0	0	173 (
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	156,940 28,666 6,019 8,824 374,334 66,476	49 25,295 0 7,650 211,317 0	6,819 336 929 0 137,226 1,749	0 0 0 0 0	143,894 2,869 30 776 22,273 62,216	0 0 0 0	5,595 0 0 40 1,686 2,511	0 0 0 0 0	583 166 5,060 358 1,832
Georgia, total	3,442,612	235,596	2,920,561	0	270,814	0	10,287	0	5,354
Department of Agriculture	46,693 4,618 43,026	34,407 942 7,719	0 2,812 10,982	0 0 0	12,212 852 23,571	0 0 0	44 0 754	0 0 0	30 12 (
development <sup>3</sup> Department of Energy	2,936,588 11,477	19,899 0	2,894,988 396	0 0	18,928 10,318	0	2,773 763	0	(
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	312,057 7,880 4,935 16,199 22,841 36,298	150,719 7,236 188 10,200 4,286	3,958 84 0 251 6,121 969	0 0 0 0 0	153,214 492 742 5,584 10,687 34,214	0 0 0 0 0	4,042 0 0 164 1,747 0	0 0 0 0 0	124 68 4,005 0 0 1,115
Hawaii, total	160,826	54,776	30,246	0	52,256	0	21,777	0	1,771
Department of Agriculture  Department of Commerce Department of Defense, research 2 Department of Defense, total	21,859 13,772 14,844	11,159 9,263 5,433	0 355 7,238	0 0 0	5,110 3,407 2,173	0 0 0	5,590 110 0	0 0 0	637 637
development <sup>3</sup> Department of Energy	45,439 3,541	23,556 0	21,381 0	0 0	502 3,421	0	0 120	0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation National Aeronautics and Space Admin National Science Foundation	21,868 5,810 548 18,574 14,571	59 5,106 0 200 0	779 52 0 41 400	0 0 0 0	17,163 523 0 6,115 13,842	0 0 0 0	3,307 129 0 12,192 329	0 0 0 0	560 548 26

## [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Idaho, total	213,625	25,042	108,599	57,105	20,652	0	1,337	0	890
Department of Agriculture	17,793 1,320 5,742	13,648 1,320 296	0 0 408	0 0 2,189	4,145 0 2,849	0 0 0	0 0 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	13,760 157,221	660 1,400	12,722 95,263	254 53,167	124 7,391	0 0	0 0	0	0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  National Aeronautics and Space Admin  National Science Foundation	2,869 9,068 2,228 912 2,712	9 7,370 0 339 0	101 5 33 67 0	0 0 1,395 100 0	1,422 1,603 0 406 2,712	0 0 0 0	1,337 0 0 0 0	0 0 0 0	0 90 800 0
Illinois, total	1,127,553	71,946	82,221	0	504,232	398,996	61,529	0	8,629
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense. total	43,013 4,720 59,088	31,528 67 11,428	0 3,590 9,909	0 0 0	11,075 683 34,155	0 0 3,385	410 380 211	0 0 0	0 0 0
development <sup>3</sup>	64,405 454,767	16,364 4,595	34,717 13,427	0 0	7,980 44,628	5,216 390,068	128 2,049	0 0	0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	342,935 5,786 11,685 2,860 17,556 120,738	342 5,112 45 0 2,465	10,615 4,601 282 3,365 1,711	0 0 0 0	274,036 205 2,626 2,578 10,187 116,079	0 0 57 0 270 0	53,520 0 804 0 1,079 2,948	0 0 0 0 0	4,422 465 3,552 0 190 0
Indiana, total	377,735	38,023	142,363	0	189,882	200	3,318	0	3,949
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	14,097 2,180 17,943	4,936 84 2,318	0 1,049 3,174	0 0 0	9,161 572 12,451	0 0 0	0 475 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	158,336 17,778	25,878 0	129,549 150	0 0	962 17,628	200 0	1,747 0	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	106,863 3,996 3,612 1,105 7,708 44,117	155 3,731 0 0 921 0	3,796 25 1,062 56 3,175 327	0 0 0 0	101,374 79 0 584 3,281 43,790	0 0 0 0 0	300 0 0 465 331 0	0 0 0 0 0	1,238 161 2,550 0 0
lowa, total	236,084	32,701	24,757	0	150,856	20,824	4,093	0	2,853
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup> Department of Energy	39,549 807 9,809 18,393 26,793	27,187 0 0 343 0	0 357 5,573 15,192	0 0 0 0	12,360 450 4,106 1,783 4,999	0 0 130 1,075 19,619	2 0 0 0 2,175	0 0 0 0	0 0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	105,402 5,362 3,051 2,369 10,666 13,883	11 5,160 0 0 0	1,951 3 0 0 1,681 0	0 0 0 0 0 0 0	101,249 120 567 2,369 8,985 13,868	0 0 0 0 0 0	1,901 0 0 0 0 0	0 0 0 0 0 0	290 79 2,484 0 0

## [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Kansas, total	128,697	24,757	19,642	0	78,444	0	1,210	0	4,644
Department of Agriculture	13,736 1,028 5,031	7,849 154 703	0 0 185	0 0 0	5,878 425 4,143	0 0 0	9 449 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	26,245 3,890	9,120 0	16,525 10	0 0	600 3,880	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	48,338 6,466 1,373 2,842 5,555 14,193	704 6,227 0 0 0 0	1,501 22 0 0 1,370 29	0 0 0 0	42,073 129 125 2,842 4,185 14,164	0 0 0 0 0	752 0 0 0 0 0	0 0 0 0 0	3,308 88 1,248 0 0
Kentucky, total	188,955	6,591	99,613	0	73,577	0	1,708	0	7,466
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	7,845 588 4,714	2 88 1,413	0 0 871	0 0 0	7,843 0 2,430	0 0 0	0 500 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	4,899 98,213	1,949 0	2,259 95,267	0 0	691 2,946	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	53,102 3,689 3,418 1,840 1,533 9,114	9 3,077 0 0 53 0	956 15 0 146 0 99	0 0 0 0 0	47,496 235 0 1,542 1,379 9,015	0 0 0 0 0	955 0 0 152 101 0	0 0 0 0 0	3,686 362 3,418 0 0
Louisiana, total	223,555	84,315	20,104	0	111,713	0	4,117	0	3,306
Department of Agriculture	43,348 3,124 9,031	31,429 1,383 979	0 53 372	0 0 0	11,879 1,688 7,640	0 0 0	40 0 40	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	28,994 4,319	5,895 0	17,993 0	0 0	5,106 4,319	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	68,012 16,097 1,676 4,962 33,797 10,195	3,751 11,149 0 0 29,729 0	156 1,177 0 0 253 100	0 0 0 0 0	60,082 3,688 0 4,962 3,815 8,534	0 0 0 0 0	4,022 15 0 0 0	0 0 0 0 0	1 68 1,676 0 0 1,561
Maine, total	103,901	10,953	44,317	0	15,190	0	31,050	0	2,391
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total  development <sup>3</sup>	3,943 6,370 9,287 38,861	4 4,156 121 3,215	0 71 6,008 35,646	0 0 0	3,934 1,274 2,557	0 0 0	5 869 601 0	0 0 0	0 0 0
Department of Energy	223	0	0	0	73	0	0	0	150
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	31,072 3,976 565 996 2,701 5,907	3,412 0 0 40 0	2,049 9 0 70 256 208	0 0 0 0 0	1,285 522 0 651 1,048 3,846	0 0 0 0 0	26,346 0 0 275 1,101 1,853	0 0 0 0 0	1,387 33 565 0 256

## [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Maryland, total	7,964,210	4,766,005	2,054,921	163,223	798,113	0	178,769	0	3,179
Department of Agriculture	138,061 348,425 373,819	130,095 333,109 250,610	206 7,723 73,959	0 0 0	7,738 7,593 43,842	0 0 0	22 0 5,408	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	2,342,076 58,127	1,254,504 27,684	919,729 10,387	0 0	162,139 11,099	0 0	5,623 8,957	0	81 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	3,233,290 12,348 24,572 8,056 1,364,748 60,688	2,370,500 11,811 3,249 0 381,677 2,766	266,992 80 13,145 3,029 754,560 5,111	163,223 0 0 0 0 0	380,322 432 6,519 4,742 131,214 42,473	0 0 0 0 0	51,323 0 0 125 96,973 10,338	0 0 0 0 0	930 25 1,659 160 324 0
Massachusetts, total	3,112,271	301,193	991,701	0	823,426	221,292	706,800	63,007	4,852
Department of Agriculture	22,399 44,145 280,359	15,920 30,771 50,322	472 8,600 93,833	0 0 0	6,007 4,274 86,755	0 0 31,831	0 500 17,243	0 0 375	0 0 0
development <sup>3</sup>	1,159,627 100,568	140,570 0	732,937 17,640	0 0	17,976 76,369	189,205 0	16,307 6,559	62,632 0	0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,124,925 6,062 38,016 19,434 143,063 173,673	1,452 4,255 31,922 0 24,983 998	89,333 342 3,964 3,325 24,363 16,892	0 0 0 0 0	435,429 1,209 113 6,457 43,498 145,339	0 0 0 0 256 0	596,604 0 55 9,125 49,963 10,444	0 0 0 0 0	2,107 256 1,962 527 0
Michigan, total	748,443	111,457	160,127	0	450,082	0	17,989	0	8,788
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	21,110 24,263 67,289	6,829 6,936 24,033	0 14,607 18,973	0 0 0	14,275 1,878 23,457	0 0 0	6 442 826	0 0 0	0 400 0
development <sup>3</sup> Department of Energy	163,625 15,880	63,338 0	84,081 0	0	13,111 15,750	0 0	3,095 130	0	0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	306,905 10,130 7,487 18,849 30,304 82,601	736 9,585 0 0 0	13,063 9 2,330 4,671 19,564 2,829	0 0 0 0 0	284,935 457 149 9,385 8,158 78,527	0 0 0 0 0	5,235 0 1,635 2,793 2,582 1,245	0 0 0 0 0	2,936 79 3,373 2,000 0
Minnesota, total	807,083	38,437	472,522	0	196,262	0	93,791	0	6,071
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total  development <sup>3</sup>	22,693 4,578 26,472 466,327	15,028 180 433 1,559	0 2,926 15,966 440,578	0 0 0	7,658 1,472 8,469 1,683	0 0 0	7 0 1,604 22,507	0 0 0	0 0 0
Department of Energy	6,564	0	0	0	6,561	0	3	0	Ő
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	211,333 8,049 5,339 14,718 8,093 32,917	685 7,502 0 12,750 300 0	7,208 7 15 438 4,583 801	0 0 0 0	131,030 499 2,368 1,530 3,170 31,822	0 0 0 0 0	69,336 0 0 0 40 294	0 0 0 0 0	3,074 41 2,956 0 0

## [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Mississippi, total	280,366	132,896	70,301	0	67,535	0	7,886	0	1,748
Department of Agriculture	60,342 6,275 50,938	42,681 5,727 35,664	0 78 3,060	0 0 0	16,868 470 12,206	0 0 0	793 0 8	0 0 0	0000
development <sup>3</sup> Department of Energy	81,929 1,833	41,370 0	35,832 376	0 0	4,727 1,457	0 0	0 0	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	13,914 6,320 1,923 1,542 47,604 7,746	5,677 393 0 1,383	145 22 0 0 30,788 0	0 0 0 0 0	13,642 539 0 1,542 8,338 7,746	0 0 0 0 0	115 0 0 0 6,970 0	0 0 0 0 0	11 82 1,530 0 125
Missouri, total	930,735	48,544	560,924	0	294,459	0	22,202	0	4,606
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	20,374 1,012 35,085	9,681 343 10,896	0 0 15,365	0 0 0	10,693 85 8,824	0 0 0	0 415 0	0 0 0	0 169 0
development <sup>3</sup> Department of Energy	546,438 4,727	13,762 21	531,964 340	0 0	712 4,356	0 0	0 10	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	264,584 13,171 2,779 2,816 16,251 23,498	634 12,484 6 0 717 0	1,777 11 150 250 10,667 400	0 0 0 0 0	239,788 562 0 2,506 4,864 22,069	0 0 0 0 0	20,606 0 79 60 3 1,029	0 0 0 0 0	1,779 114 2,544 0 0
Montana, total	80,670	33,101	9,897	0	32,949	0	3,149	0	1,574
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	17,657 5,091 5,517	11,597 53 15	15 0 576	0 0 0	4,665 4,738 4,926	0 0 0	1,380 300 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	7,276 984	2,606 0	4,670 35	0 0	0 875	0 0	0 0	0 0	74
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	12,861 14,887 1,229 321 6,177 8,670	5,011 13,794 0 0 25 0	714 31 0 0 3,437 419	0 0 0 0 0	5,764 841 100 321 2,579 8,140	0 0 0 0 0	1,222 0 0 0 136 111	0 0 0 0 0	150 221 1,129 0 0
Nebraska, total	84,982	28,873	2,104	0	46,328	0	6,572	0	1,105
Department of Agriculture	27,427 744 4,838	19,297 106 473	0 0 762	0 0 0	8,130 38 3,603	0 0 0	0 600 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	2,779 705	2,302 0	406 0	0 0	71 705	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	30,566 6,956 905 250 2,305 7,507	12 6,683 0 0 0	602 0 0 0 234 100	0 0 0 0 0	23,837 194 52 220 2,071 7,407	0 0 0 0 0	5,942 0 0 30 0	0 0 0 0	173 79 853 0 0

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	Total		Extramural							
State and agency		Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts	
Nevada, total	290,853	48,514	211,316	0	25,268	0	4,107	0	1,648	
Department of Agriculture	2,869 115 11,964	436 0 8,897	0 2 1,230	0 0 0	2,398 113 1,837	0 0 0	35 0 0	0 0 0	0 0 0	
development <sup>3</sup> Department of Energy	31,789 194,692	17,456 10	13,906 191,035	0 0	427 2,865	0 0	0 782	0 0	0	
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	9,894 9,508 4,946 14,637 2,914 7,525	11 8,488 0 12,750 466 0	216 0 2,039 1,155 1,733 0	0 0 0 0 0	7,915 881 68 584 655 7,525	0 0 0 0 0	1,342 0 1,948 0 0	0 0 0 0 0	410 139 891 148 60 0	
New Hampshire, total	269,132	33,959	163,677	0	69,064	0	1,669	0	763	
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	4,673 7,824 45,282	2,562 5 9,261	0 1,705 31,731	0 0 0	2,109 6,114 3,715	0 0 0	2 0 575	0 0 0	0 0 0	
development <sup>3</sup> Department of Energy	139,110 670	19,096 0	118,169 0	0 0	854 670	0 0	991 0	0 0	0 0	
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	35,610 1,971 2,191 889 18,349 12,563	5 1,824 283 0 350 573	2,769 0 14 0 8,477 812	0 0 0 0 0	32,548 99 1,366 889 9,522 11,178	0 0 0 0 0	101 0 0 0 0	0 0 0 0 0	187 48 528 0 0	
New Jersey, total	1,459,570	392,554	784,488	0	218,031	37,387	17,106	6,082	3,922	
Department of Agriculture	7,226 23,458 114,869	19 15,892 37,155	0 3,272 54,270	0 0 0	7,207 3,834 23,260	0 0 115	0 460 17	0 0 52	0 0 0	
development <sup>3</sup> Department of Energy	880,567 69,267	298,359 0	573,431 14,369	0 0	2,672 17,401	0 37,272	0 225	6,030 0	75 0	
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	123,404 3,970 107,756 5,044 64,684 59,325	198 3,514 35,365 0 1,902 150	14,454 136 69,185 0 52,483 2,888	0 0 0 0 0	95,006 221 449 2,159 9,647 56,175	0 0 0 0 0	12,755 0 0 2,885 652 112	0 0 0 0 0	991 99 2,757 0 0	
New Mexico, total	1,891,565	395,908	170,514	614,018	85,267	608,320	15,147	0	2,391	
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	7,431 1,400 87,902 498,879	3,650 43 40,431 318,138	0 1,113 27,892 100,437	0 0 6,616 57,017	3,771 0 9,010 3,032	0 0 3,647 20,255	10 244 306 0	0 0 0	0 0 0	
Department of Energy  Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	1,175,695 46,423 9,351 6,371 4,278 40,943 12,892	9,031 1,693 8,806 0 0 13,630 486	26,171 2,302 60 65 993 10,074 1,407	548,800 0 0 1,333 0 252 0	9,958 32,651 241 394 100 16,179 9,931	574,435 6,122 0 3,370 0 390 101	7,300 2,717 0 0 3,185 418 967	0 0 0 0 0 0 0	938 244 1,209 0 0	

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					Extramural						
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts		
New York, total	2,551,833	191,988	709,033	0	1,121,737	213,181	221,286	0	94,608		
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	33,988 18,360 140,444	16,169 972 57,338	102 10,403 30,634	0 0 0	16,721 5,808 49,523	0 27 982	996 550 1,967	0 0 0	0 600 0		
development <sup>3</sup> Department of Energy	465,914 553,803	98,642 6,351	352,109 275,480	0 0	12,967 61,593	0 207,628	2,196 2,751	0	0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,076,498 8,200 9,836 8,621 58,805 177,364	1,421 6,377 450 0 4,268	20,820 61 2,122 11 14,263 3,028	0 0 0 0 0	774,425 1,752 1,860 5,749 28,083 163,256	1,749 0 0 0 1,953 842	190,151 0 0 2,861 10,238 9,576	0 0 0 0 0	87,932 10 5,404 0 0 662		
North Carolina, total	924,652	235,873	121,168	0	499,001	0	63,610	0	5,000		
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	33,582 13,234 67,277	17,100 4,717 18,423	499 5,705 10,568	0 0 0	15,920 2,812 36,551	0 0 0	63 0 1,735	0 0 0	0 0 0		
development <sup>3</sup> Department of Energy	73,087 16,848	23,178 425	43,247 0	0 0	6,382 15,251	0 0	280 1,172	0 0	0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	517,469 7,504 5,095 132,314 13,266 44,977	85,021 5,424 0 81,559 27 0	20,564 1,273 0 35,051 1,609 2,652	0 0 0 0 0	359,319 568 2,023 10,712 8,497 40,966	0 0 0 0 0	50,821 55 0 4,992 3,133 1,359	0 0 0 0 0	1,744 184 3,072 0 0		
North Dakota, total	52,088	27,360	376	0	21,036	0	1,145	0	2,171		
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	26,003 659 2,001	20,240 99 1	0 0 0	0 0 0	5,763 560 2,000	0 0 0	0 0 0	0 0 0	0 0 0		
development <sup>3</sup> Department of Energy	555 5,167	200 0	355 0	0 0	0 5,167	0 0	0 0	0	0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	2,872 6,893 1,720 1,100 1,854 3,264	5 6,815 0 0 0	9 12 0 0 0	0 0 0 0 0	2,113 25 0 1,100 1,794 2,514	0 0 0 0 0	335 0 0 0 60 750	0 0 0 0 0	410 41 1,720 0 0 0		
Ohio, total	5,562,227	698,173	4,388,253	0	344,724	0	125,380	0	5,697		
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup> Department of Energy	15,579 4,387 282,323 4,276,668 16,901	7,067 58 182,980 190,954 0	0 3,074 64,441 4,054,163 7,927	0 0 0	8,156 955 20,743 11,856 8,595	0 0 0 0	348 300 14,159 19,695 379	0 0 0	8 0 0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	360,550 5,397 14,638 64,938 482,907 37,939	33,319 4,780 4,941 48,450 225,624 0	15,538 18 4,075 10,272 227,732 1,013	000000	236,409 427 1,837 3,791 15,208 36,747	0 0 0 0 0	74,237 0 80 1,950 14,053	0 0 0 0 0	1,047 172 3,705 475 290		

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Oklahoma, total	175,497	51,038	54,017	0	60,570	0	7,988	0	1,884
Department of Agriculture	17,712 6,642 19,313	10,676 6,472 8,015	0 3 6,667	0 0 0	7,036 167 4,631	0 0 0	0 0 0	0 0 0	0
development <sup>3</sup> Department of Energy	22,127 26,475	9,953 1,424	11,939 21,371	0 0	235 3,680	0 0	0 0	0 0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	34,946 5,489 11,787 14,326 3,212 13,468	11 5,217 1,620 7,650 0	919 4 8,307 3,407 1,101 299	0 0 0 0 0	26,018 159 199 3,269 2,111 13,065	0 0 0 0 0	7,884 0 0 0 0 104	0 0 0 0 0	114 109 1,661 0 0
Oregon, total	314,710	87,846	24,915	0	171,995	0	20,849	0	9,105
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	35,129 16,004 13,898	23,735 11,088 0	0 1,608 2,489	0 0 0	11,281 3,053 11,409	0 0 0	113 114 0	0 0 0	0 141 0
development <sup>3</sup> Department of Energy	2,780 34,653	534 27,988	1,394 244	0 0	462 3,696	0 0	390 75	0 0	2,650
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	135,026 12,117 1,834 24,064 9,159 30,046	21 11,533 0 12,780 167 0	9,479 10 10 4,695 3,518 1,468	0 0 0 0 0	101,013 401 543 6,389 5,170 28,578	0 0 0 0 0	19,853 0 0 0 304 0	0 0 0 0 0	4,660 173 1,281 200 0
Pennsylvania, total	1,886,258	132,927	702,304	219	853,437	16,884	173,970	0	6,517
Department of Agriculture	42,490 5,924 161,383	30,989 109 1,599	113 3,550 62,168	0 0 0	11,210 653 80,227	0 0 16,744	178 1,612 645	0 0 0	0
development <sup>3</sup> Department of Energy	426,151 340,893	27,909 44,828	328,862 257,371	0 0	35,613 25,959	140 0	33,627 12,735	0 0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	725,576 8,140 9,039 4,751 51,497 110,414	19,222 6,223 123 0 1,925	16,201 169 1,169 136 31,809 756	0 0 219 0 0	573,450 1,482 1,371 4,615 16,856 102,001	0 0 0 0 0	116,609 0 0 0 907 7,657	0 0 0 0 0	94 266 6,157 0 0
Rhode Island, total	385,411	222,106	78,082	0	60,182	0	22,978	0	2,063
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	1,835 3,727 31,024 260,829	1,054 20,924 188,055	0 493 1,905 72,774	0 0 0	1,757 2,180 8,137	0 0 0	76 0 58	0 0 0	0 0 0
Department of Energy	2,356	0	0	0	2,351	0	5	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	49,613 2,477 1,001 12,007 3,308 17,234	5 1,561 50 10,199 256 0	1,260 0 300 1,250 0 100	0 0 0 0 0	25,318 916 0 524 2,841 16,158	0 0 0 0 0	21,618 0 0 34 211 976	0 0 0 0 0	1,412 0 651 0 0

## [Dollars in thousands]

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			Extramural								
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts		
South Carolina, total	186,221	44,872	22,122	18,191	92,443	0	2,583	692	5,318		
Department of Agriculture	14,864 10,699 15,092	8,443 8,085 937	0 61 4,851	0 0 0	6,110 2,553 9,270	0 0 0	0 0 34	0 0 0	311 0 0		
development <sup>3</sup> Department of Energy	37,177 28,331	22,368 1	12,130 888	0 18,191	1,033 8,537	0 0	954 714	692 0	0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	50,813 4,501 1,812 2,312 3,296 17,324	16 3,672 0 0 1,350	3,570 191 0 0 31 400	0 0 0 0 0	44,686 162 51 1,862 1,890 16,289	0 0 0 0 0	275 0 0 0 25 581	0 0 0 0 0	2,266 476 1,761 450 0 54		
South Dakota, total	46,003	27,501	6,083	0	9,429	0	2,125	0	865		
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	7,007 677 1,349	4,018 102 334	0 0 343	0 0 0	2,989 0 672	0 0 0	0 575 0	0 0 0	0 0 0		
development <sup>3</sup> Department of Energy	450 50	395 0	55 0	0 0	0 50	0 0	0 0	0 0	0 0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	2,578 13,526 781 275 15,950 3,360	740 8,631 0 0 13,281	365 4,846 16 0 40 418	0 0 0 0 0	1,323 49 0 275 1,129 2,942	0 0 0 0 0	50 0 0 0 1,500 0	0 0 0 0 0	100 0 765 0 0		
Tennessee, total	621,155	37,925	54,239	307,181	181,024	10,256	27,685	0	2,845		
Department of Agriculture	8,712 1,598 17,381	1 886 1,972	0 0 4,843	0 0 3,065	8,711 187 7,499	0 0 0	0 525 2	0 0 0	0 0 0		
development <sup>3</sup> Department of Energy	47,443 319,786	20,052 1,604	14,034 13,459	12,577 286,521	780 8,078	0 9,975	0 149	0 0	0 0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	168,671 6,193 4,382 1,467 29,971 15,551	1,812 5,154 282 0 5,957 205	3,984 12 196 149 16,653 909	0 0 1,390 0 3,628 0	135,644 994 0 1,318 3,435 14,378	281 0 0 0 0 0	26,950 0 0 0 0 59	0 0 0 0 0	0 33 2,514 0 298		
Texas, total	4,110,756	596,978	2,741,834	0	691,377	0	69,230	1,496	9,841		
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup> Department of Energy	63,664 12,545 166,667 933,699 22,885	47,422 2,590 56,786 75,692	0 4,185 69,704 831,541 1,266	0 0 0 0	16,221 5,770 37,621 22,048 21,270	0 0 0	10 0 2,556 2,839 349	0 0 0 1,496	11 0 0 83 0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	523,738 23,049 12,444 14,976 2,265,388 71,701	2,036 18,873 0 0 393,579 0	14,480 718 3,746 1,601 1,812,232 2,361	0 0 0 0 0	477,396 3,215 409 11,175 27,930 68,322	0 0 0 0 0 0	28,981 83 0 2,000 31,394 1,018	0 0 0 0 0 0	845 160 8,289 200 253 0		

## [Dollars in thousands]

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					E:	Extramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Utah, total	392,807	135,365	111,547	0	142,514	0	1,296	0	2,085
Department of Agriculture	13,527 2,293 19,258	8,153 84 6,776	0 1,502 5,039	0 0 0	5,373 232 7,443	0 0 0	1 0 0	0 0 0	0 475 0
development <sup>3</sup> Department of Energy	221,015 8,000	113,144 0	95,044 865	0 0	12,827 6,800	0	0 0	0 0	0 335
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	78,397 7,802 852 1,208 16,306 24,149	40 6,802 0 0 366 0	4,316 54 25 70 3,919 713	0 0 0 0 0	72,863 636 0 1,138 12,021 23,181	0 0 0 0 0	1,040 0 0 0 0 255	0 0 0 0 0	138 310 827 0 0
Vermont, total	57,596	4,171	12,827	0	37,865	0	1,483	0	1,250
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	5,418 776 2,315	1,679 126 743	0 0 237	0 0 0	3,739 40 1,335	0 0 0	0 610 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	11,325 584	372 0	10,896 141	0 0	57 370	0 0	0 73	0 0	0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	29,291 1,378 497 743 699 4,570	5 1,246 0 0 0 0	496 8 0 0 556 493	0 0 0 0 0	28,020 84 0 143 4,077	0 0 0 0 0	620 0 0 180 0	0 0 0 0 0	150 40 497 563 0
Virginia, total	4,667,864	1,480,464	2,694,070	879	244,283	61,895	43,793	135,732	6,748
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	9,580 13,022 378,068	801 4,439 105,043	0 6,876 228,092	0 0 183	7,917 1,482 30,078	0 0 0	862 225 6,060	0 0 8,612	0 0 0
development <sup>3</sup> Department of Energy	3,299,279 86,785	1,035,758 12,254	2,124,529 3,664	696 0	16,108 8,398	150 61,745	3,428 724	118,610 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	167,903 43,493 30,455 21,704 557,914 59,661	4,201 41,904 264 0 271,050 4,750	27,618 580 18,599 15,942 248,826 19,344	0 0 0 0 0	121,857 891 2,310 1,902 21,057 32,283	0 0 0 0 0	12,657 46 1,200 3,860 11,545 3,186	546 0 4,894 0 2,972 98	1,024 72 3,188 0 2,464
Washington, total	1,244,174	183,685	427,331	0	355,630	0	121,688	149,770	6,070
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	36,264 61,629 44,902 376,187	23,367 55,976 3,558 82,953	0 1,980 16,807 286,172	0 0 0	12,728 3,174 20,721 3,443	0 0 0	159 89 1,263 419	0 0 2,553 3,200	10 410 0
Department of Energy	161,184	118	5,603	0	17,726	0	263	137,474	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	381,681 11,445 5,148 5,272 109,947 50,515	7,787 9,151 0 0 748 27	15,581 19 1,577 0 97,044 2,548	0 0 0 0 0	234,239 2,001 15 4,035 10,484 47,064	0 0 0 0 0	115,911 0 0 1,037 1,671 876	5,276 0 1,267 0 0 0	2,887 274 2,289 200 0

## [Dollars in thousands]

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	Total		Extramural								
State and agency		Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts		
West Virginia, total	242,844	96,682	84,815	0	26,830	30,448	868	0	3,201		
Department of Agriculture	20,579 647 5,992	16,276 97 0	0 0 3,555	0 0 0	3,888 550 2,437	0 0 0	38 0 0	0 0 0	377 0 0		
development <sup>3</sup> Department of Energy	12,076 101,577	446 46,610	11,627 49,956	0	0 4,165	0	721	0	125		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	39,299 7,089 2,453 187 18,286 34,659	26,654 6,599 0 0 0	2,988 12 1,117 0 11,603 3,957	0 0 0 0 0	8,691 114 150 0 6,581 254	0 0 0 0 0 30,448	0 0 7 102 0	0 0 0 0 0	966 364 1,186 180 0		
Wisconsin, total	332,203	38,021	16,017	0	265,640	0	8,233	0	4,292		
Department of Agriculture	34,177 4,547 8,092	24,555 517 287	11 1,875 992	0 0 0	9,594 2,155 6,813	0 0 0	17 0 0	0 0 0	0 0 0		
development <sup>3</sup> Department of Energy	3,906 20,031	402 0	2,390 0	0 0	1,114 19,511	0	0 520	0 0	0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	185,558 12,733 2,952 1,988 14,615 43,604	7 12,253 0 0 0 0	6,057 5 27 125 3,967 568	0 0 0 0 0	170,526 374 712 1,300 10,530 43,011	0 0 0 0 0	7,478 0 0 75 118 25	0 0 0 0 0	1,490 101 2,213 488 0		
Wyoming, total	33,549	11,991	1,108	0	16,758	0	2,827	0	865		
Department of Agriculture	6,833 24 2,697	4,685 0 96	0 0 0	0 0 0	2,144 24 2,601	0 0 0	4 0 0	0 0 0	0 0 0		
development <sup>3</sup> Department of Energy	254 3,787	101 0	0 0	0 0	153 964	0	0 2,823	0	0		
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,938 7,454 1,778 450 850 7,484	7,105 0 0 0 0	292 0 125 0 412 279	0 0 0 0	1,617 271 891 450 438 7,205	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	25 78 762 0 0		
Outlying areas, total <sup>4</sup>	111,908	40,238	16,847	0	46,129	8,058	0	0	636		
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	13,273 1,029 2,453 43,496	5,063 620 500 26,700	0 0 0 16,796	0 0 0	8,210 408 1,953	0 0 0	0 0 0	0 0 0	0 1 0		
Department of Energy	841	0	0	ő	841	0	ő	0	ő		
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	26,837 6,575 530 157 3,755 12,962	682 6,243 430 0 0	36 15 0 0 0	0 0 0 0 0	25,484 317 100 157 3,755 4,904	0 0 0 0 0 8,058	0 0 0 0 0	0 0 0 0 0	635 0 0 0 0		

#### [Dollars in thousands]

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			Extramural								
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts		
Puerto Rico, total <sup>4</sup>	61,938	7,476	51	0	45,718	8,058	0	0	635		
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Energy Department of Health & Human Svcs	13,273 994 1,953 841 26,837	5,063 616 0 0 682	0 0 0 0 36	0 0 0 0	8,210 378 1,953 841 25,484	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 635		
Department of the Interior Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,166 157 3,755 12,962	1,115 0 0 0	15 0 0 0	0 0 0 0	36 157 3,755 4,904	0 0 0 8,058	0 0 0 0	0 0 0 0	0 0 0 0		
Other areas, total <sup>4</sup> Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	49,970 35 500	32,762 4 500	16,796 0 0	0 0 0	411 30 0	0 0 0	0 0 0	0 0 0	1 1 0		
development <sup>3</sup>	43,496 5,409	26,700 5,128	16,796 0	0 0	0 281	0 0	0 0	0 0	0 0		
Department of TransportationNational Science Foundation	530 0	430 0	0 0	0 0	100 0	0 0	0 0	0	0 0		
Offices abroad, total	18,222	15,434	2,487	0	301	0	0	0	0		
Department of Agriculture Department of Defense, research <sup>2</sup> Department of Defense, total	3,132 1,998	3,132 1,937	0	0 0	0 61	0 0	0 0	0 0	0 0		
development <sup>3</sup>	13,092	10,365	2,487	0	240	0	0	0	0		

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

<sup>4</sup> Outlying areas, total represents the sum of Puerto Rico, total and Other areas, total.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D and R&D plant obligations in fiscal year 1998.

**KEY:** FFRDCs = Federally funded research and development centers

Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems. Geographic data for these categories are not reported; therefore, this table shows only total development.